

REMARKS

This application has been carefully reviewed in light of the Office Action dated November 30, 2006. Claims 1, 8, 15, 22, 29, 30, 31, 35 and 36 are pending in the application, with Claims 6, 13, 20, 27 and 33 having been cancelled herein. Claims 1, 8, 15, 22, 29, 30, 31, 35 and 36 are independent. Reconsideration and further examination are respectfully requested.

As an initial matter, Applicants thank the Examiner for the courtesies and thoughtful treatment afforded to Applicants' representative during the March 6, 2007, telephonic interview with the Examiner.

Claims 1, 8, 15, 22, 29 to 31, 35 and 36 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,396,284 (Freeman) in view of U.S. Patent No. 5,424,772 (Aoki) and U.S. Patent No. 6,677,936 (Jacobsen). Claims 1, 8, 15, 22, 29 to 31, 35 and 36 were rejected under 35 U.S.C. § 103(a) over Freeman in view of Aoki and U.S. Patent No. 6,104,864 (Kondo). Claims 6, 13, 20, 27 and 33 were rejected under 35 U.S.C. § 103(a) over Freeman, Aoki, and Jacobson, and further in view of U.S. Patent No. 5,621,429 (Yamaashi). Claims 6, 13, 20, 27 and 33 were rejected under 35 U.S.C. § 103(a) over Freeman, Aoki, and Kondo, and further in view of Yamaashi. Reconsideration and withdrawal of these rejections are respectfully requested.

The present invention relates to receiving frame images from a camera and displaying the frame images automatically and independently of users control operation. One feature of the present invention includes automatically detecting whether or not a current frame image displayed by a display unit is updated by a next frame image being received in a summary mode. In the summary mode, receiving one frame image from the

camera corresponds to displaying a flashing icon one time and display of a non-flashing icon corresponds to a period of time between receiving the one frame image from the camera and receiving a subsequent frame image from the camera. In this way, a user can more quickly assess when a currently displayed frame image is updated by a next frame image. This feature can be helpful, for example, in identifying disruptions of frame image reception from cameras while the cameras are operating.

Referring specifically to the claims, independent Claim 1 defines a communication apparatus. The communication apparatus comprises a reception unit for receiving frame images generated from a plurality of cameras via a network in a summary mode in which frame images generated from a plurality of cameras are displayed automatically and independently of users' control operation, and an output unit for outputting the frame images received by said reception unit in order to display the frame images for each respective communication terminal on a display unit as multiple image displays corresponding respectively to each of the plurality of cameras. The communication apparatus also comprises a detection unit for automatically detecting whether or not, for each respective camera, a current frame image displayed by the display unit is updated by a next frame image being received by the reception unit without users' control operation in the summary mode, and a notification unit for causing the display unit to display, for each respective one of the multiple image displays, an icon indicating an update state of the received frame images for the respective image display, wherein the icon is displayed on a predetermined area of the display unit at a time when the corresponding frame image is displayed. The notification unit causes a flashing icon to be displayed corresponding to an updating state when the detection unit detects that a current

frame image displayed by the display unit is updated by a next frame image, and causes a non-flashing icon to be displayed corresponding to a non-updating state when the detection unit detects that a current frame image displayed by the display unit is not updated by a next frame image. In the summary mode, receiving one frame image from the camera corresponds to displaying the flashing icon one time and display of the non-flashing icon corresponds to a period of time between receiving the one frame image from the camera and receiving a subsequent frame image from the camera. The notification unit does not perform notification when a frame rate of the received frame images is high, and performs notification when the frame rate is reduced.

Independent Claims 8, 22 and 35 are method claims, independent Claims 15 and 31 are apparatus claims, and independent Claims 29, 30 and 36 are storage medium claims which are seen to generally correspond to independent Claim 1.

The applied references are not seen to disclose or to suggest the features of independent Claims 1, 8, 15, 22, 29 to 31, 35 and 36, and in particular, are not seen to disclose or to suggest at least the features of automatically detecting whether or not a current displayed frame image is updated by a next frame image being received without users' control operation in a summary mode, in which frame images generated from a plurality of cameras are displayed automatically and independently of users' control operation, and causing to display an icon indicating an update state of the received frame images, wherein in the summary mode, receiving one frame image from the camera corresponds to displaying a flashing icon one time and display of a non-flashing icon corresponds to a period of time between receiving the one frame image from the camera and receiving a subsequent frame image from the camera, and wherein causing to display

an icon does not perform notification when a frame rate of the received frame images is high, and performs notification when the frame rate is reduced.

In contrast, Freeman discloses a motion detection system in which elements of a statistical array derived from an image are compared with corresponding array elements derived from an earlier image. The Office Action concedes that Freeman does not disclose detecting whether or not a current frame image displayed is updated by a next frame image being received, or disclose or suggest causing to display an icon indicating an update state of the received frame images for the respective image display, a flashing icon displayed in a first condition corresponding to an updating state when the detection unit detects that a current frame image displayed is updated by a next frame image, and a non-flashing icon displayed in a second condition when the detection unit detects that a current frame image displayed is not updated by a next frame image, and wherein in the summary mode, receiving one frame image from the camera corresponds to displaying the flashing icon one time and display of the non-flashing icon corresponds to a period of time between receiving the one frame image from the camera and receiving a subsequent frame image from the camera.

Aoki discloses a camera with an LCD panel that indicates the mode and setting that has been selected by a user. Aoki discloses a camera playing a video image and displaying a PLAY icon in response to a user pressing a play button on the camera. Because the user causes the video image to play upon pressing the play button, the user recognizes when the video image is being played. Thus, recognizing when the video image is being played is accomplished by virtue of the user's control operation of pressing the play button. Aoki is silent on automatically detecting whether or not a current displayed

frame image is updated by a next frame image being received without users' control operation. Therefore, Aoki fails to disclose or suggest at least the features of independent Claims 1, 8, 15, 22, 29 to 31, 35 and 36.

Jacobsen discloses a microdisplay system that provides a viewfinder in an electronic image record system such as a digital camera or video camera. Jacobsen discloses that a LED backlight is flashed to present a refreshed or new image. However, a "backlight" of a liquid crystal display circuit does not teach or suggest an icon displayed on a predetermined area of a display unit. Furthermore, the LED flashes for a time period of about three milliseconds, i.e. more than 300 times a second. Thus, it is unlikely that a user can recognize a flash corresponding to a frame image. Therefore, Jacobsen fails to disclose or suggest at least the feature of performing notification indicating an update state of a received frame image, wherein receiving one frame image from a camera corresponds to displaying a flashing icon one time.

The remaining cited reference, namely Kondo, is not seen to cure the deficiencies of Freeman, Aoki, and Jacobsen, either alone or in any permissible combination. Accordingly, Applicants submit that independent Claims 1, 8, 15, 22, 29, 30, 31, 35 and 36 are now in condition for allowance and respectfully request same.

No other matters being raised, it is believed that the entire application is fully in condition for allowance, and such action is courteously solicited.